REMARKS

Examiner Interview

Applicant's Attorney interviewed the Examiner and his SPE on March 16, 2011 – the SPE was a signer on the present Office Action. Many issues relating to the case were discussed, but little if any movement resulted.

Applicant has submitted an IDS covering references that Applicant read from during the interview (not previously on the record) to counter the Official Notice taken by the Examiner regarding the relationship between aspen and birch. Applicant went to the trouble and expense to make this submission, because it appeared that the Examiner did not give these references proper consideration during the interview, despite USPTO rules and case law concerning taking Official Notice (see below). Now that these references (and two others found since the interview) have been filed in an IDS, Applicant hopes that the Examiner will give them proper consideration.

It was suggested to Applicant that an allowable method claim might be written. Applicant has added 2 new claims based on this suggestion.

There was no mention of an interview summary at the end of the interview. Applicant is not sure if the Examiner intends to write one, so has decided not to wait to file this response. Applicant reserves the right to comment upon any interview summary written by the Examiner for this interview.

Claim Amendments

No claims were amended per se, but 2 new claims were added at the suggestion of the Examiner as explained above.

Allowable Subject Matter

Applicant acknowledges the Examiner's conclusion concerning allowability of the subject matter of claims 11 and 12. Applicant may or may not agree with each of the reasons the Examiner gives here. Given the unsettled nature of the case, Applicant has decided not to rewrite these claims in independent form just yet — Applicant still maintains that the base claims from which claims 11 and 12 depend (claims 1 and 10) are allowable.

Response to Arguments

Applicant is surprised to see that the Examiner has so little if anything to agree with in the arguments presented by Applicant in the previous response in this case.

As to the Examiner's response on page 3 of the Office Action on the dilution issue, it appears that the Examiner is somewhat inconsistent in interpreting claim 1 – it might be helpful if the Examiner made a clear and detailed statement on his claim interpretation. In any case, Applicant points out that Dunlap teaches dilution of the Sylvatal 40 DD <u>before</u> doing anything else with it. Also, the dilution is by the method of Farley – which the Examiner has yet to describe despite being asked to explain this by Applicant on more than one occasion – the Examiner based rejections on the Dunlap reference, so it would seem that the Examiner needs to state what this Farley method is as it may have a relevant effect; this seems even more so since the Examiner found the Dunlap reference, not Applicant. Applicant reminds the Examiner that he has the burden to establish that the reference meets all the limitations of rejected claims for 102 rejections, and he correspondingly has the burden to establish a *prima facie* case for 103 rejections which would also require a full statement of the relevant limitations of the references used.

Applicant points out that while the claims might in at least in some cases allow for dilution, there may be some limits on the basis, point in time or location and/or extent of dilution. The dilutions that the Examiner points out from the examples are for saponification used in making some (not all) embodiments of the cooking aid; it may be of note that the effective dilution mentioned by the Examiner for this saponification is to

around 33% (w/w) in example 1 (later used in the cooking of birch) and not 20% as in Dunlap (used to cook aspen).

In any case, the Examiner must choose one way on how to take the basis of the cooking aid composition in the claims, state it on the record and apply it consistently.

As to the Examiner's response on page 3-4 of the Office Action on the issue of "about", Applicant challenges the Examiner to show a basis in the law for this interpretation of "about". There is nothing reasonable about this interpretation – it could lead to huge extensions of ranges if generally applied.

As to the Examiner's response on page 4 of the Office Action on the issue of using birch instead of aspen. Applicant is mystified as to what the Examiner is trying to say here. How is it that the Examiner can say that he is not arguing that birch is a substitute for aspen? If he is not making this argument, then why does he go to the trouble of giving reasons that aspen and birch are similar woods? Also, for nearly all the "similarities" he points to here and in other points in the Office Action, he does not back them up with a reference; taking Official Notice like this is frowned upon in both the MPEP and more importantly in the case law. Applicant points the Examiner to MPEP 2144.03 and cases cited therein, such as In re Ahlert, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), where it is stated that the notice of facts beyond the record which may be taken by the examiner must be "capable of such instant and unquestionable demonstration as to defy dispute." MPEP 2144.03 in fact has a relevant section heading that reads: "If Applicant Challenges a Factual Assertion as Not Properly Officially Noticed or Not Properly Based Upon Common Knowledge, the Examiner Must Support the Finding With Adequate Evidence." The Examiner should consider himself challenged here. The IDS references that Applicant has just submitted show that aspen and birch have many significant and relevant differences in any case.

This business of Dunlap saying that birch and aspen are high in extractives and have similar pitch problems is scant proof at best; it is interesting that Dunlap states in the same paragraph that the Examiner points to here (page 366, paragraph 2) that the amount of extractives may not be as important as their composition. So what about this? How similar are the compositions? Neither Dunlap nor the Examiner it seems enlighten us on these points.

In any case, if what the Examiner points to from Dunlap is such a revelation, then why has no one used birch as in the present invention in all the years since 1989 when Dunlap was published? Apparently, it has not been done or the Examiner would have found a reference stating this and cited it instead. To be clear on this, Applicant is alluding to one of the secondary considerations that may be used to rebut a *prima facie* case of obviousness, long felt but unsolved need (see MPEP 2145 discussion and *Graham v. Deere* 148 USPQ at 467).

The Examiner makes a somewhat difficult to decipher statement based on KSR (without any citation). In any case, it does not seem that KSR has overruled the Graham case as to "reasonable expectation of success" being a requirement in establishing a prima facie case of obviousness (see discussion at MPEP 2143.02). Aspen and birch are quite different woods (see references in recently field IDS), and in any case Dunlap tests only aspen with only one distilled tall oil against one crude tall oil and does not get a slam dunk for the distilled tall oil — so how is it reasonable to jump from Dunlap to using a distilled tall oil to process birch as the Examiner does, and what about when the Examiner extends this to a large range of distilled tall oils?

As to the Examiner's response on page 5 of the Office Action on the issue of extension from one tall oil, Applicant has addressed some of this in the preceding paragraphs. Moving to other points here, the fact that Dunlap states a reason for distilled tall oil being better than crude is of little value to the Examiner here – Dunlap only tested one of each on aspen only.

Concerning the Examiner's remarks as to what is claimed by Applicant here, Applicant replies that this is irrelevant; the standards for claim support and anticipation/obviousness

are not really the same in any case. The Examiner may be attempting to indirectly use hindsight here which is *verboten* (forbidden) in this context (see MPEP 2145 and cases there for example). The Examiner should check Applicant's examples again – only some use birch. Further, the alleged lack of a showing by Applicant that distilled tall oil is better than crude is irrelevant – since when is improvement a requirement for patentability?

As to the Examiner's response on page 5 of the Office Action as to dilution and wood and Dunlap and Magee, see comments above.

As to the Examiner's response on page 5-6 of the Office Action on the extending to other distilled tall oils, Applicant repeats the Dunlap tests one distilled tall oil against one crude tall oil and finds that the crude tall oil is sometimes better than the distilled. Dunlap says the ratio concerning saponifiables is a *possible* factor – there is not enough data in Dunlap to give this much credence. In any case, is this ratio quantified by Dunlap?

As to the Examiner's response on page 6 of the Office Action on the definition of neutrals, the Examiner has misread what Applicant stated here. Applicant was pointing out a difference in definition.

As to the Examiner's response on page 7 of the Office Action on the issue of small sampling, Applicant points out that distilled tall oil is made in many countries outside the USA in much variety. It is also a factor that the testing done in Dunlap was very limited making the extension via Magee unreasonable.

As to the Examiner's response on page 7-8 of the Office Action on the issue of picking and choosing, Applicant responds that even if the Examiner is right about the numbers matching up, there is the issue of Dunlap's dilution. More importantly, Applicant does not see how the Examiner can properly make the jump to combine Dunlap and Magee. How does one go from testing one distilled tall oil in Dunlap to all the varieties in Magee – Magee says nothing about using the tall oils there for cooking wood. Applicant does not

agree with the way the Examiner has interpreted "about" in most if not all instances here

- asserting reasonableness is not sufficient. As to the comments on differences in
concentration and criticality, Applicant has disclosed that ratios of the components in the
tall oils used are significant. The Examiner has made a similar statement in the case of
distilled versus crude tall oils in his arguments – so does it matter or not?

As to the Examiner's response on page 8-9 of the Office Action on the issue of the double bonds, Applicant responds that even if the Examiner is correct here, this may not be enough to invalidate any of Applicant's claims given other limitations that must be met. In addition, it is not clear how the new references here are combinable with Dunlap and Magee.

Note that it is not believed that any of the rejections below would apply to the new claims as they are based on claim 12 (which the Examiner has stated is allowable subject matter) and other claims which Applicant traverses as to the rejections below.

The Examiner should keep in mind the comments that Applicant has made so far when considering the claim rejections below. Not all of these comments will be repeated in detail below.

Claim Rejections 35 USC 102

Claims 1, 3-10, 13-17 and 24 were rejected under 35 USC 102(b) as being anticipated by Dunlap as evidenced by a data sheet for Sylvatal 40DD; it appears that claim 20 was also rejected here as well given that it is mentioned later in the rejection here this way.

First, Applicant notes that the Examiner has not listed the data sheet on his list of references cited. Applicant would appreciate it if he would so that it is clearly of record. It seems that Applicant cannot do this given a "glitch" in the IDS rules. Applicant sent it in response to a requirement for information which avoided the IDS issue.

The Examiner may note that the tradename in this data sheet is actually Actinol S40DD and not Sylvatal 40 DD, but they are the same material. For some reason, it was decided at some point to change the tradename for this material. To summarize the most relevant points from this data sheet, this material is a distilled tall oil with a rosin acids content of 26-32% (typically 28%), a fatty acids content typically of 69.9% and an unsaponifiables content typically of 2.1%.

Applicant believes that the Examiner has misinterpreted the teachings of Dunlap in several respects (as stated in the previous response by Applicant). First, Dunlap looks at <u>one</u> distilled tall oil (some "earlier work" is also mentioned which might have looked at a second tall oil, but it is not characterized sufficiently to be used as a basis for a rejection here) versus a limited number of other materials; this hardly justifies a conclusion (based on Dunlap) that distilled tall oils are always superior as they do vary considerably in content, as do say crude tall oils (<u>one</u> of which was used by Dunlap for comparison). In any case, the distilled tall oil used in Dunlap was <u>not</u> the best at removing extractives in every case (see Table 3 on page 377) - the Examiner continues to ignore this relevant fact.

Perhaps the most important issue is what was actually used in the testing in Dunlap. On page 368, it is revealed that the Sylvatal 40 DD was diluted to a 20% solution by the method of Farley, and it appears that this is what was used for the testing – that is, added to a cooking liquor for processing aspen.. Such an extreme dilution would change the ranges of the components significantly and depending on what the Farley method actually involved, other significant changes may have occurred.

The Examiner has repeatedly avoided providing a reference showing the method of Farley (a citation is given in Dunlap so the Examiner could find it), so Applicant now takes the position that since all rejections made in this Office Action depend directly or indirectly on whatever this Farley method does to the Sylvatal 40 DD in Dunlap, then all the rejections in this Office Action should be withdrawn, since the Examiner has not in effect met his burden as to showing all claim limitations in the reference for the 102

rejections and correspondingly has failed to meet his burden as to claim limitations for the 103 rejections. Furthermore, this brings the finality of this Office Action into serious question.

Applicant will respond to the rest of this Office Action, however, so as not to create further delay in prosecution.

It may also be of relevance that Dunlap does <u>not</u> equate neutrals and unsaponifiables as indicated on page 368 of this reference (see comments on the Sylvatal under Materials).

Doing the math and following the interpretation the Examiner seems most likely to have used (mentioned above) as to the composition of the cooking aid (it would help if the Examiner clearly state his interpretation in any case), a 20% solution of Sylvatal 40 DD would have a rosin acids content of 5.2 to 6.4% which is outside the ranges in the rejected claims (about 20 to about 98% or about 35 to about 80%). In fact, even without dilution, the Sylvatal 40 DD is outside the range for rosin acids recited in claim 3 and 24 (26-32% versus about 35 to about 80%); as stated above, the Examiner's interpretation of "about" here is anything but reasonable and should be abandoned, unless the Examiner can show a basis in law for it. Thus, considering the data sheet in light of what was actually taught by Dunlap, Dunlap does not anticipate any of the rejected claims. The rejection should be withdrawn. Of course, the method of Farley is not taken into account here.

For completeness, Applicant will mention that distilled tall oils as a group make up a genus with lots of variation, and in any case, it is a well established maxim that a genus cannot anticipate a species. The Examiner may have said otherwise in comments he made in regards to claims 4, 5, 7, 8, 9, 10 and 15 in this rejection. Further, Applicant's Attorney doubts that detailed composition information as to Sylvatal 40 DD on the order of what is in claims 4, 5, 7-10 and 15 is available anymore. Such information is not needed to overcome the rejection here in any case (via dependency on claim 1 for which the rejection is traversed).

Claim Rejections 35 USC 103

The Examiner made two separate rejections here.

The first was an obviousness rejection of claim 21-23 over Dunlap and the Sylvatal 40 DD data sheet.

In this rejection, the Examiner asserts that it would be have been obvious to substitute birch for the aspen used in the Dunlap reference for various reasons. Before reaching this issue, Applicant points out that as explained above, Dunlap actually discloses use of a 20% solution of the Sylvatal 40 DD which is outside the range required by claims 21-23, thus this rejection is traversed and should be withdrawn. Any issue with the method of Farley cannot be ascertained at this point as explained above; as discussed above, this rejection should be withdrawn in any case since the Examiner has not made the method of Farley part of the record, and it is relevant here.

Even though it is not necessary to consider this to traverse this rejection, Applicant does not believe that the Examiner has made the point that the substitution of birch for aspen is obvious here. Applicant believes that it is well known to those of ordinary skill in the art that aspen has not been favored among hardwoods for pulping – this even seems to be suggested in the very first sentences of Dunlap; thus not all hardwoods are "equal" in the world of pulping. Birch is a popular hardwood for pulping at least in Scandinavia as disclosed in the specification for the instant application (see around line 10 on page 1). The Examiner asserts (without any real objective evidence) that since they are both hardwoods that aspen and birch would have similar fibers etc etc – apparently similar enough in the Examiner's mind to be obvious substitutes here; this does not seem to be the actual case given how the pulping industry has treated these various woods.

As previously discussed, the Examiner has in effect taken Official Notice here concerning properties of aspen and birch. As discussed above, Applicant challenges this and demands that the examiner prove his point.

Note that the IDS recently provided lists four relevant documents here; the Examiner might wish to use these to settle the challenge, but they prove Applicant's point here not his. The first two of these references concern the taxonomy of aspen and birch – they are not closely related. The third shows that the density of aspen is on the order of pine (a softwood) and birch has a much higher density; further, birch releases much higher energy than aspen per unit volume when burnt, indicating important differences as well; these properties would be expected to correlate with differences in processing such as cooking. The fourth reference compares and contrasts maple, aspen and birch; not only are there differences in aspen and birch, but the differences found when comparing all three (hardwoods) indicate that hardwoods are not a close knit group property-wise. Thus, sweeping generalizations as to birch and aspen being so similar since they are hardwoods are not warranted.

The disclosure as to extractives and pitch problems relating to aspen and birch in Dunlap is of little relevance here, except perhaps to show a secondary consideration to rebut obviousness (if any) as explained above.

Further, as discussed above, the results of Dunlap do not justify the generalizations reached by the Examiner. Dunlap shows that <u>one</u> distilled tall oil is better than <u>one</u> crude tall oil most <u>(but not all)</u> of the time for cooking <u>aspen</u> (this ignores the "earlier work" in Dunlap which is not given in detail but hardly justifies being the basis of the Examiner's generalization even if considered here). This does not seem to be a good basis for it to be obvious to jump from crude tall oil treatment of birch to distilled tall oil treatment of birch.

The second obviousness rejection was to claims 1, 3-10, 13-17 and 20-24 over Dunlap in view of Magee.

As explained above, Dunlap teaches using a 20% solution of the distilled tall oil (and this is a basis for traverse of the 102 rejection above using Dunlap and would also work to traverse any 103 rejection on Dunlap alone similarly); applying this to the data in Table 1

of Magee gives a range of resin acids (presumably the same here as rosin acids) of 6.4 to 16.6% (before corrected for neutrals which will lower the numbers in this range). Rosin acids are about 20 to about 98% or about 35 to about 80% in the rejected claims which are well above the ranges in Magee (after dilution). Thus, the rejection is traversed and should be withdrawn. Any issue with the method of Farley cannot be ascertained at this point as explained above; as discussed above, this rejection should be withdrawn in any case since the method of Farley has not been made part of the record by the Examiner, and it is relevant here.

Note that in the "earlier work" cited in Dunlap, it is uncertain what the tall oils used were as to composition or even at what dilution they were used. It is possible that none were even distilled tall oil. This work cannot then be used as a basis of rejection here or elsewhere.

It may be of note that neutrals and unsaponifiables are not equivalents in Dunlap as explained above. Magee lists compositions in terms of the acids and neutrals.

In any case, the Examiner has not given a good reason why it would have been obvious to use any of the distilled tall oils in Magee in the process of Dunlap. As already discussed, Dunlap shows that <u>one</u> distilled tall oil works better than a few other materials in such a process most (<u>but not all</u>) of the time. Distilled tall oils vary as to composition greatly, so why would it be obvious to substitute just any one for the one in Dunlap? As the Examiner admits, Dunlap itself does not even disclose the composition of the distilled tall oil used there – this results in a flaw in this rejection as it does not reference the data sheet.

Further, the Examiner uses the small sampling in Magee to generalize as to specific components of distilled tall oils in general. Also, there is the issue of picking and choosing from the laundry list of distilled tall oil alternatives in Magee with no guidance from the prior art. It may be of note that many of the distilled tall oils in Magee are not that close in composition to the Sylvatal 40 DD used in Dunlap even before dilution.

In the first paragraph of page 13 of the Office Action, the Examiner makes a series of assertions and provides little or no basis for them. It is almost as if he is saying it is obvious because I say so — which is not an acceptable reason. The testing in Dunlap is very limited and the distilled tall oil is not shown to be superior in all cases, so how can this be the basis for what the Examiner asserts here. There is simply not enough in Dunlap to warrant such general conclusions. One cannot determine a trend from a single data point; this is really what the Examiner is trying to do here.

In his comments as to specific claims here, the Examiner has taken a few "liberties" in interpretation that seem excessive to Applicant, such as the interpretation of "about" on page 13-14 and the assertion on page 14 that in effect says that one data point can be the basis for optimization. Another example, for claim 15, the Examiner assumes a position for double bonds and justifies this with a reference to MPEP 2112.01 – the problem here is that tall oils vary a lot and are not identical (or even nearly so) over their range, so this section of the MPEP is inapplicable. The Examiner is obligated to show something like this in a reference and not just make an assertion.

For other specific claims on pages 14-15, the Examiner has assumed that he can make the combination with Magee, but as has been explained over and over, this requires that he be able to generalize from Dunlap, and one data point (and since this distilled tall oil is not always superior makes even this one iffy) does not a generalization support.

The rejection as to claims 21-23 relies on the same flawed arguments used above to make the jump from aspen to birch. This is refuted as above.

Conclusion

In view of the remarks above, Applicant believes that the claims as they now stand are in a condition for allowance. Prompt allowance of all pending claims is respectfully requested.

In the event that the Examiner is not willing to allow the claims as they now stand, then Applicant requests that the Examiner send an Advisory Action as soon as possible.

If it would be helpful in resolving any issues in this Application, the Examiner is invited to contact Applicant's Attorney, Charles R. Richard, at 202-246-3320.

Date: 3/19/11___

Respectfully Submitted,

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